

State of Alaska FY2006 Governor's Operating Budget

**Dept. of Commerce, Community, and Economic Dev.
Alaska Energy Authority Rural Energy Operations
Component Budget Summary**

Component: Alaska Energy Authority Rural Energy Operations

Contribution to Department's Mission

The mission of the Alaska Energy Authority Rural Energy Operations component is to assist in the development of safe, reliable and efficient energy systems throughout Alaska, which are sustainable and environmentally sound, and to reduce the cost of energy in rural Alaska.

Core Services

- Bulk Fuel and Rural Power Systems Upgrades
- Alternative Energy and Energy Efficiency
- Utility systems training, fuel systems training, business plan training
- Active Loan Programs – Power Project Fund, Bulk Fuel Revolving Loan Fund
- Administration of grants to Named Recipients

End Results	Strategies to Achieve Results
A: Upgrade non-code compliant bulk fuel facilities with code-compliant facilities in sustainable rural communities <u>Target #1:</u> Upgrade 100% of sustainable rural Alaskan energy facilities to code compliancy <u>Measure #1:</u> Percentage Code Compliant	A1: Reduce the number of non-code compliant facilities <u>Target #1:</u> Upgrade 13 rural facilities annually. <u>Measure #1:</u> # completed upgrade projects per year
End Results	Strategies to Achieve Results
B: Reduce the unit cost of energy in rural Alaska by 15%	B1: Upgrade equipment at rural power systems to increase diesel efficiency and utilize other energy sources <u>Target #1:</u> 15% increase in generation capacity (kWh produced) <u>Measure #1:</u> % change in kilowatt hours produced B2: Providing energy audits and installation of energy cost saving equipment in community facilities <u>Target #1:</u> 20% decrease in kilowatt hour usage for facilities upgraded <u>Measure #1:</u> % change in Kilowatt hours used in upgraded facilities at current levels of use. B3: Manage the Bulk Fuel Revolving Loan Fund to maximize the amount available to eligible communities <u>Target #1:</u> Loans over 90 days delinquent not more than

5%

Measure #1: % of loan delinquencies

Major Activities to Advance Strategies

- Design/construct tank farms and powerhouses and distribution systems
- Issue/administer contracts
- Coordinate with communities and other government agencies
- Develop business plans
- Apply for grant funds
- Install metering
- Install switchgears
- Install heat recovery
- Perform energy audits
- Project management
- Install wind generating equipment
- Install wind monitoring stations
- Replace generators with high efficiency diesel generators
- Recruitment of eligible trainees
- Development of site-specific training curriculum
- Develop/expand curriculum for powerhouse training

FY2006 Resources Allocated to Achieve Results

FY2006 Component Budget: \$3,022,000

Personnel:

Full time	0
Part time	0
Total	0

Performance Measure Detail**A: Result - Upgrade non-code compliant bulk fuel facilities with code-compliant facilities in sustainable rural communities****Target #1:** Upgrade 100% of sustainable rural Alaskan energy facilities to code compliancy**Measure #1:** Percentage Code Compliant

Analysis of results and challenges: Upgrading facilities will allow communities to continue to receive fuel. 64 out of 143 bulk fuel projects have been upgraded by AEA.

A1: Strategy - Reduce the number of non-code compliant facilities**Target #1:** Upgrade 13 rural facilities annually.**Measure #1:** # completed upgrade projects per year**Number of Completed Upgrade Projects per Year**

Year	YTD
2000	3
2001	9
2002	8
2003	12
2004	11
2005	20

Analysis of results and challenges: A total of 21 projects were completed in years previous to 2000.

B: Result - Reduce the unit cost of energy in rural Alaska by 15%

B1: Strategy - Upgrade equipment at rural power systems to increase diesel efficiency and utilize other energy sources

Target #1: 15% increase in generation capacity (kWh produced)

Measure #1: % change in kilowatt hours produced

Analysis of results and challenges: Equipment upgrades will reduce the dependency on diesel fuel. AEA estimates a 10% increase in capacity kilowatt hours produced in upgraded facilities. This new measure will measure generation efficiency.

B2: Strategy - Providing energy audits and installation of energy cost saving equipment in community facilities

Target #1: 20% decrease in kilowatt hour usage for facilities upgraded

Measure #1: % change in Kilowatt hours used in upgraded facilities at current levels of use.

Analysis of results and challenges: Energy cost saving equipment installation will reduce the dependency on diesel fuel. Results will be assessed in each facility following the upgrade. This new measure measures effectiveness of upgrades.

B3: Strategy - Manage the Bulk Fuel Revolving Loan Fund to maximize the amount available to eligible communities

Target #1: Loans over 90 days delinquent not more than 5%

Measure #1: % of loan delinquencies

As of 10/31/04, Delinquencies (over 90 days) of Loans Disbursed per Year as a Percentage of Total Loans Disbursed in the Respective Year

Year	YTD
2000	2.5%
2001	0%
2002	0%
2003	0%
2004	0.7%
2005	0%

Analysis of results and challenges: Bulk fuel purchases reduce a community's cost of energy. As of 10/31/04, total loans over 90 days delinquent/total loans outstanding is 4.08%. This measures the ongoing viability of the program, limited loan delinquencies ensures future funds to loan.

Key Component Challenges

The primary challenge for AEA is to schedule Denali Commission requested Bulk Fuel and Rural Power System Upgrade projects with an unpredictable funding stream.

In its continued efforts to reduce energy costs in rural Alaska in the most cost effective manner, AEA has taken an integrated program approach to analyze communities' current and planned infrastructure to determine the energy needs. A single community project may address fuel storage, power house upgrades, alternative energy and energy efficiency needs.

AEA is working with the Denali Commission to develop a community monitoring program to ensure that the Denali Commission sustainability requirements and conditions are met over the long term.

Significant Changes in Results to be Delivered in FY2006

No significant changes.

Major Component Accomplishments in 2004

AEA completed or initiated construction of bulk fuel facility upgrades in 11 communities.

AEA completed or initiated construction of rural power system upgrades in 14 communities.

AEA received an additional \$ 26.8 million in Denali Commission funds for projects.

AEA administered bulk fuel operator training for 26 students, itinerant bulk fuel operator training for 17 students, power plant operator training for 19 students, advanced power plant operator training for 6 students, utility clerk training for 29 students, and hydro power plant training for 7 students.

Statutory and Regulatory Authority

AS 42.45	Rural and Statewide Energy Programs
3 AAC 106	Loan Programs
3 AAC 107	Grant Programs
3 AAC 160	Rural Development Assistance and Bulk Fuel Storage Facility Grant Programs

Contact Information

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Alaska Energy Authority Rural Energy Operations Component Financial Summary

All dollars shown in thousands

	FY2004 Actuals	FY2005 Management Plan	FY2006 Governor
Non-Formula Program:			
Component Expenditures:			
71000 Personal Services	0.0	0.0	0.0
72000 Travel	0.0	124.5	164.5
73000 Services	0.0	2,679.6	2,699.5
74000 Commodities	0.0	18.0	48.0
75000 Capital Outlay	0.0	5.0	10.0
77000 Grants, Benefits	0.0	0.0	100.0
78000 Miscellaneous	0.0	0.0	0.0
Expenditure Totals	0.0	2,827.1	3,022.0
Funding Sources:			
1002 Federal Receipts	0.0	68.3	68.3
1004 General Fund Receipts	0.0	188.6	188.6
1007 Inter-Agency Receipts	0.0	155.1	350.0
1061 Capital Improvement Project Receipts	0.0	1,198.9	1,198.9
1062 Power Project Loan Fund	0.0	965.2	965.2
1074 Bulk Fuel Revolving Loan Fund	0.0	51.0	51.0
1108 Statutory Designated Program Receipts	0.0	200.0	200.0
Funding Totals	0.0	2,827.1	3,022.0

Estimated Revenue Collections

Description	Master Revenue Account	FY2004 Actuals	FY2005 Management Plan	FY2006 Governor
Unrestricted Revenues				
None.		0.0	0.0	0.0
Unrestricted Total		0.0	0.0	0.0
Restricted Revenues				
Federal Receipts	51010	0.0	68.3	68.3
Interagency Receipts	51015	0.0	155.1	350.0
Statutory Designated Program Receipts	51063	0.0	200.0	200.0
Capital Improvement Project Receipts	51200	0.0	1,198.9	1,198.9
Bulk Fuel Revolving Loan Fund	51270	0.0	51.0	51.0
Power Project Loan Fund	51350	0.0	965.2	965.2
Restricted Total		0.0	2,638.5	2,833.4
Total Estimated Revenues		0.0	2,638.5	2,833.4

**Summary of Component Budget Changes
From FY2005 Management Plan to FY2006 Governor**

All dollars shown in thousands

	<u>General Funds</u>	<u>Federal Funds</u>	<u>Other Funds</u>	<u>Total Funds</u>
FY2005 Management Plan	188.6	68.3	2,570.2	2,827.1
Proposed budget increases:				
-Bulk Fuel Tank, Power Plant, Hydroelectric & Spill Response Training	0.0	0.0	194.9	194.9
FY2006 Governor	188.6	68.3	2,765.1	3,022.0